Recommended Locations for Protected Bike Lanes

After the joint Feb. 18, 2021 meeting of the Environmental Sustainability Council (ESC) and the CACT, both committees agreed to further explore ways to improve bicycling in Falls Church. Two questions were raised:

- 1. Is there a viable route for students to safely bicycle to the middle and high schools from the W&OD Trail across or parallel to the Falls Plaza (the shopping center with Giant and Staples that is being rebranded as Birch & Broad) property?
- 2. Where should Falls Church City prioritize building its first 1-2 miles of protected bicycle lanes?

This memo focuses on the CACT's exploration of the second question and identifies several segments to prioritize for protected bike lanes, based on:

- 1. The road being a useful connection for bicyclists
- 2. The road or alternatives being unsafe to ride "as is"
- 3. A modest level of change/construction required.

0.9 miles are readily implementable

• S. Maple Ave. from Broad St. to Fairfax St. (0.2 miles)

- o Bicycle lanes already exist, but protection could be added
- o Provides a link between Broad St. and Tinner Hill commercial areas
- Does not provide a full connection but provides protection on area of S. Maple with most traffic
- Could be built as part of the One City Center development.

Annandale Road from Washington St. to Big Chimneys Park (0.2 miles)

- o Achievable with road diet (4-lane road today) and minor parking impacts
- Creates a stronger link between multiple commercial areas on Annandale Road that would be otherwise unsuitable for most bicycle users.
- o Could be built as part of the One City Center development.

• Hillwood Ave. from Cherry St. to Washington St. (0.5 miles)

- o Bicycle lanes already exist for most of the distance and would just need protection added.
- o Solving for a safe bicycle route across Annandale Road and to the new multi-modal transit plaza (with a link north from there to S. Maple Ave.) would remove a major barrier to bicycling in area

1.3 more miles would make big improvements and create critical links

• S Oak St. (or S. Lee St.) from Broad St. to Seaton Lane (0.5 miles)

- Provides a link to TJ/Oak St. Elementary from Broad St. and neighborhoods north and a link to the trail along Tripps Run
- Would be particularly effective when combined with intersection improvements planned for Broad St.
- Would likely have a neighborhood parking impact that would need to be understood
- o Because S. Oak St. serves as a cut-through from Washington St. (Route 29) to Broad St., it is not as safe to bike on today as a "neighborhood street" might suggest.
- o Adding a protected bike lane would act as a traffic calming measure. Alternatively, a route down S. Lee St. to existing off-road trail could be built, although parking here appears more utilized.

• Little Falls from the W&OD Trail to Broad St. (0.5 miles)

- While this would likely have some parking impact, utilization is low and it is a quieter street so crossing the street to get to your car is not a major challenge.
- o Would provide a clear link from the W&OD to City Hall and nearby commercial areas
- o Could be a protected cycle track (one side of road only)

Great Falls from West St. to Riley St. (0.3 miles)

- This provides a direct connection to the W&OD Trail for people coming from the Williamsburg Boulevard bike lanes in Arlington and for Falls Church City residents who live north of the W&OD.
- The section from the W&OD to Riley St. would link the trail to neighborhood streets that provide access to Broad St. commercial areas.
- This road is unsuitable for most bicycle users today due to traffic volumes and speed. Bicycle lanes would help reduce average vehicle speeds.
- Protected bike lanes would impact parking but utilization is low
- o Could be a protected cycle track (one side of the road)

Other roads to consider

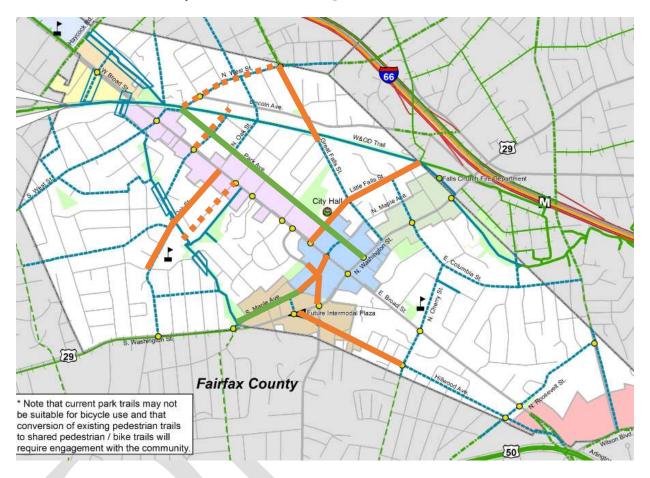
- Park Ave. (0.9 miles) is a critical bicycle link parallel to Broad St. The Bicycle Master Plan indicates this should be a sort of shared bicycle boulevard although the current (faded) sharrows do little to give road users this impression. A true boulevard design or protected bicycle lane should be considered (see visual examples of bicycle infrastructure below)
- N. Spring St. (0.2 miles) would connect the W&OD to neighborhood streets south of Broad St. including Berman Park and the future "Green Loop". The road is a wide one-way for one block and neighborhood street for one block, so adding a 2-way bicycle lane would allow bicyclists access southbound and minimal change would be needed. S. Spring St. is too narrow for a bicycle lane.
- South Maple Ave. from Fairfax Drive to Cavalier Trail Park (0.3 miles) this should also be considered for a more thorough Bicycle Boulevard treatment. It is too narrow for a bicycle lane (without removing high-utilization parking) but could work as a Boulevard. Could be done with any Tinner Hill area redevelopment along South Maple.
- West St. (1.3 miles) could be a valuable link between Founders Row, the W&OD, and the bike lanes in Arlington. However, road width, traffic, and parking utilization likely make it infeasible to add bicycle lanes (protected or otherwise) in the near future.

Map of recommended routes

Six recommended segments in orange

Alternative to Oak St. (Lee St.) and West Falls optional segment in dotted orange

Recommended enhanced bicycle boulevard routes in green



Visual examples of bicycle infrastructure

Park Ave. 2021: Faded sharrows are only bicycle infrastructure.



Sample bicycle boulevard with distinctive markings



Bicycle facilities
Bicycle lane (S. Maple Ave.)



Protected bicycle lane (L St. NW, D.C.)



Cycletrack (1st St. NE, D.C.)



Full assessment of major connecting roads (based on 2015 Bicycle Master Plan routes)

| Road | From/To | Length (miles) | Solves a gap in bike network | Risky to ride "as is" | Easy to add PBL |
|-----------------------------|-------------------------------|----------------|-------------------------------------|--------------------------|---------------------------------|
| S. West St. | Broad St. to | 0.6 | Access to W&OD and | Through street | Significant local |
| S. West St. | City line | 0.0 | Founders Row | with traffic | parking impact |
| N. West St. | Broad St. to | 0.7 | Link to Arlington bike | Through street | Significant local |
| 14. West St. | City line | 0.7 | lanes & Founders Row | with traffic | parking impact |
| Great Falls | N West St. to | 0.8 | Link W&OD to areas | Through street | Feasible north of Riley |
| St. | Washington St. | 0.0 | north and south | with traffic | St.; too narrow further |
| J | washington st. | | | count truggie | south |
| Park Ave. | Washington St. to West St. | 0.9 | Access to Broad St. commercial area | Limited local traffic | Very wide street |
| N. Spring St. | Broad St. to | 0.2 | Link W&OD to Broad | Must ride on | Wide one-way street; |
| | W&OD | | & south FCC | sidewalk | ample space for 2-way |
| | | | | southbound | protected lane; S. |
| | | | | | Spring St. too narrow |
| Little Falls | W&OD to | 0.5 | Either option would | Limited traffic, | Parking impact but |
| St. | Broad St. | | link W&OD to Broad | lights | may be manageable |
| N. Maple | Broad St. to E. | 0.5 | and Maple area | Limited local | Significant local |
| Ave. | Jefferson St. | | | traffic | parking impact |
| S. Maple | Washington St. | 0.5 | Either or parts of both | Multi-lane road | Feasible north of |
| Ave. | to Broad St. | | would link Broad St. | | Fairfax St. |
| | | | to Hillwood Ave. and Tinner Hill | | (unprotected bike lanes exists) |
| Annandale | Broad St. to | 0.4 | | Multi-lane road | Feasible with road diet |
| Road | Hillwood Ave | | | | |
| Hillwood | Washington St. | 0.9 | Link to east FCC and | Multi-lane road | Bike lanes exist to |
| Ave. | to Roosevelt | | Seven Corners | | Smallwood Way |
| E. & W. | Cherry St. to | 0.4 | East-West link across | Limited local | Significant local |
| Columbia St. | Little Falls | | Washington | traffic | parking impact |
| N Roosevelt | Broad St. to | 0.5 | Link to Hillwood and | Multi-lane road | Unclear if road is wide |
| St. | City line | | EFC Metro | | enough |
| S. Oak St. | Broad St. to | 0.5 | Connection to TJ/Oak | Cut-through | Parking impact but |
| and/or S. Lee | Seaton Lane | | St. Elementary | from Route 29 | may be manageable |
| St. | | | | | (low utilization) |
| South FCC roads to complete | | 0.5 | Connects multiple | Neighborhood | Parking impact but |
| "Green Loop" (Portions of | | | linear park paths; | streets | may be manageable |
| Sherrow, Oak/Timber/Parker | | | eventual W&OD link | | (low utilization) |
| /Spring, Ellison) | | | at Founders II | | |